

ABSTRACT

An imaging device such as a CMOS image sensor has a cover attached to a standoff surrounding a micro-lens array. Standard wafer processing fabricates the standoff (e.g., out of photoresist) and attaches the cover. The standoff maintains a gap over the micro-lenses. An adhesive attaches the cover to the standoff and can be kept away from the micro-lenses by a barrier having a structure similar to the standoff. Particles in the adhesive can prevent the adhesive from squeezing out from between the cover and the standoff during attachment. The standoff (and barrier if present) can provide a vent to prevent pressure in the gap from causing distortion or damage. The shape of the vent can prevent particles from entering the gap. Cutting the attached cover exposes electrical connections and can use preformed grooves in the cover to allow cutting of the cover without damaging underlying circuit elements.